

Stakeholders' Expectations Regarding the YKK Group Operations: Aiming to Achieve a Sustainable Society



From left: Student: Shion Matsuoka (Environmental Systems Major, Toyama Prefectural University Junior College); Consumer: Rika Inagaki (Promoter of global warming prevention activities in Toyama); Resident: Hisao Daijogo (Vice Chairman, Muratsubaki Promotion Society)/Nature conservation group representative: Kenji Yamamoto (Vice Chairman, Kurobe Meisui Kai); Facilitator: Noriyasu Kunori, Ph.D., (Professor, Department of Environmental Engineering, Faculty of Engineering, Toyama Prefectural University); Local spokesman: Matsunori Nakaya (Assistant Manager in charge of Environmental Affairs, Living Environment Section, Citizen Affairs Department, Kurobe City); Trading partner: Akira Hirano (President & CEO, Hirano Komuten K.K.)

In 2010, the YKK Group began holding annual stakeholder dialogues with stakeholders, the third of which was held at the Kurobe Office on March 21, 2012. At this year's dialogue, Group representatives and stakeholders exchanged opinions from the medium- and long-term perspectives on the themes listed at right. The Group also reported on activities undertaken in response to opinions voiced by stakeholders at the dialogue held in 2011.

Comments and Opinions on Issues Addressed in 2011 Stakeholder Dialogue	
Coexistence with Nature	<ul style="list-style-type: none"> · Development of biotopes in local ecosystem (utilization of Education for Sustainable Development (ESD)) · Survey of groundwater usage across the entire Kurobe River alluvial fan (in collaboration with local governments and universities)
"Cycle of Goodness" and Global Expansion	<ul style="list-style-type: none"> · Without ethics, there can be no compliance · Manufacturing = Personnel development
Universal Quality	<ul style="list-style-type: none"> · Human factor technologies, ideas of universal design · Approach to new energy without relying on fossil fuels
In Harmony with Regional Communities	<ul style="list-style-type: none"> · Offering best practice for cooperation · Providing personal skills to society

Development of Biotopes in the Local Ecosystem (Utilization of ESD)

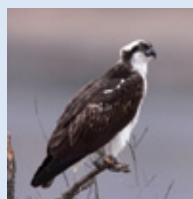
In fiscal 2011, surveys were conducted on four occasions, from March through October, of the birds, insects, fish, and benthic species living in two biotopes on the Kurobe Office premises that we have named Furusato no Mizube. The next survey is scheduled to take place in five years in 2016. In fiscal 2012, the



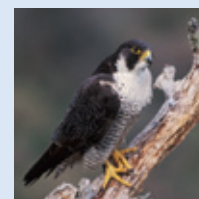
Conducting a survey of the creatures in the biotopes

Group plans to host a biotope observation session for Toyama Prefecture elementary school students in upper grades and their parents during the summer vacation season.

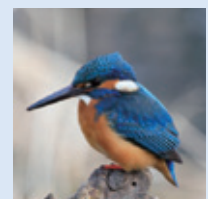
Principal Rare and Vulnerable Species Found on the Kurobe Office Premises



Osprey



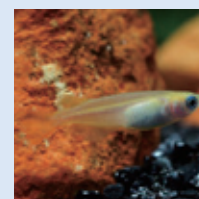
Falcon



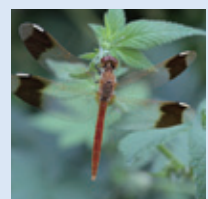
Kingfisher



Amur sticklebacks



Killifish



Dragonfly
(Miyama-akane)

Discussion of the Fiscal 2011 Activities Report: “Coexistence with Nature”

• Biotores in the Local Ecosystem (Utilization of ESD)

Professor Kunori (Professor): “On the Kurobe office premises, the YKK Group is nurturing biotores inhabited by a number of rare and vulnerable species. Do you have any questions or opinions about this?”

Nakaya (Local spokesman): YKK’s biotope is an open place, how do you address the problems of alien species?”

YKK: We implemented an action policy aimed at safeguarding the genetic legacy of Kurobe and installed an underwater camera to conduct periodic underwater observations.

Nakaya (Local spokesman): Can you ensure that no given species exerts a negative impact on the ecosystem through excessive breeding?”

Matsuoka (Student): The biotores are connected to the adjacent irrigation channels as well as to the surrounding land. Biological surveys of the surrounding areas should be conducted.

YKK: Water flows from the biotores into the Yoshida river, and treated water from the YKK plant flows into the river through its drainage port. For the last 10 years, we have been closely observing the various species inhabiting the river in order to assess the impact of the plant.

Professor: One way to conduct a broad and detailed survey like a census or wider-ranging survey is to request the assistance of local NPOs and universities.

• Survey of Groundwater Usage across the Kurobe River Alluvial Fan (in collaboration with local governments and universities)

Daijogo (Resident): Some residents say that the groundwater level is higher on Saturday and Sunday, and lower on weekdays. I would like YKK to look into this.

YKK: Since December 2011, we have been observing the water level of an artesian well on the premises of Koshino Junior High School using an automatic system. We will immediately report if we find a causal relationship between our groundwater usage and groundwater level.

Hirano (Trading partner): Concrete irrigation channels and paved roads prevent rainwater from penetrating the ground. This may cause a groundwater shortage. Research into these factors may help us better assess the whole situation.

Daijogo (Resident): I would like YKK to measure the water level of an artesian well in Muratsubaki area, too.

YKK: Upon the approval and cooperation of artesian well owners, we would like to start making observations soon.

Professor: We ask for the cooperation of residents in conducting observations.

Yamamoto (Nature conservation group): It is predicted that there will be an increasing water resource shortage. I hope that YKK will work to tackle these problems in line with the times.

Inagaki (Consumer): Since the first dialogue, I have been making inquiries about groundwater and appreciate YKK’s survey results, which get more detailed with each meeting. Nevertheless, it is important to assess overall groundwater situation. I would like YKK to broaden the scope of its surveys so that we can see how much influence on groundwater levels YKK’s groundwater usage has.

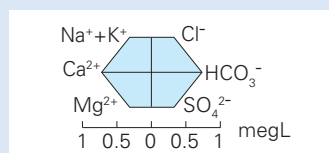
Yamamoto (Nature conservation group): I suppose that more effective data will be obtained if YKK conducts separate assessments of employee and industrial water usage.

Professor: I hope that through its actions—for example, the assessment of the current groundwater level in the Kurobe River alluvial fan—YKK will be able to demonstrate its consideration for the environment. If they are successful, YKK’s initiatives can be introduced a best practice. Although the use of groundwater has been significantly reduced, we would like YKK to make further efforts.

Survey of Groundwater Usage across the Entire Kurobe River Alluvial Fan (in Collaboration with Local Governments and Universities)

The Group is seeking further sustainable usage of groundwater in the Kurobe River alluvial fan. Aiming to analyze the current situation and make reliable forecasts, the Group is consigning the survey of and research on all aspects of groundwater to Mr. Taichi Tebakari a lecturer in the Department of Environmental Engineering, Faculty of Engineering, Toyama Prefectural University. Survey results will be disclosed to the public in accordance with Kurobe City’s water resource policies. Surveys of water quality as well as groundwater levels were conducted in fiscal 2011. The Group will continue surveys in fiscal 2012 and thereafter.

Hexagonal graph clearly illustrating water quality



Scope and results of water quality survey

Groundwater in Oshima (red circle) is significantly different from water in other areas (dotted-line) in terms of quality. The Cl⁻ value in the diagram at left is notably high, indicating that the water salinization level is increasing.

Report on Activities Based on Opinions from the 2011 Dialogue and Principal Countermeasures against Earthquake and Tsunami Damage

In the following section, YKK reports on activities undertaken in response to opinions voiced on topics other than "Coexistence with Nature" and introduces the countermeasures it has currently implemented against earthquake and tsunami damage based on stakeholders' requests.

●"Cycle of Goodness" and Global Expansion

Without ethics, there can be no compliance: To ensure the adoption of management ethics, meetings of top management and local employees were held around the world. (Please see page 18 for details.)

Manufacturing = Personnel development: YKK's Technical traditions are passed on to younger employees through the Gino Dojo (manufacturing skills training center) and technology training classes. (Please see page 19 for details.)

●Universal Quality

Human factor technologies, ideas of universal design: YKK has released such innovative products as the Plate Type Push-Pull Lock System, a door that requires half the usual amount of force to open and close, and the Smart Control Key, which can be easily used by a child. (Please see page 17 for details.)

Approach to fossil fuel-free new energy: A small hydraulic power generator utilizing the kinetic energy of coolant water was installed experimentally. Also, plans call for a heat-pump air conditioning system that exploits the thermal differential between outside air and groundwater. (Please see page 24 for details.)

●In Harmony with Regional Communities

Offering best practice for cooperation: YKK developed "Mission: Cleanup," a voluntary program that operated the "Jimmy Carter Kurobe Meisui Road Race" marathon in addition to other volunteer activities.

Providing personal skills to society: YKK employees provided environmental education at a childcare facility (please see page 15 for details), cooperated with Kurobe Mizu-no Shonen-dan (a youth volunteer group) in an aquatic survey and seconded personnel to local volunteer associations.

●Countermeasures against Earthquake and Tsunami Damage Supportive measures provided to the community: Based on the results of a tsunami simulation conducted by Toyama Prefectural authorities, YKK intends to offer the Furumido Plant grounds as a heliport and temporary storage area for relief supplies in tandem with Kurobe City.

Countermeasures: YKK and Kurobe City are lobbying the government for the installation of a detached breakwater and dam. At the Kurobe Ekko Plant, a one meter high bank capable of holding back water is under construction as a countermeasure against Yorimawari giant swell waves, which are a characteristic danger of Toyama bay.



Stakeholders' Expectations Regarding YKK Group Operations: Aiming to Achieve a Sustainable Society

①Development of New Products in Line with Social Change

●Working toward a Low-Carbon, Recycling-Oriented Society

Hirano (Trading partner): In the housing industry, Smart Houses that utilize such clean energy as solar power are being designed by major housing firms. I am well aware of the energy-saving effects of products like "APW" heat insulation windows but I would like YKK to develop bigger housing products. I also hope that YKK can advance the fireproof qualities of windows.

Daijogo (Resident): I have been troubled by the poor durability of wire screen doors. I would like YKK to develop a long-lasting screen made with fully tested materials.

●In Line with Social Change

Yamamoto (Nature conservation group): I would like YKK to consider housing policies in tandem with the Japanese government and develop such products as housing in which the room arrangements can be changed flexibly. Also, there will be need for products that are easier for the elderly to handle, for example, clip-on ties and dress shirts with easy to use fasteners.

YKK: These are interesting ideas, thank you.

Professor: The key issue is how to address changing needs.

Providing the Opportunity to Learn How YKK Group Products Are Made: Traditional Fastener Handcrafting Class

During the 2011 Stakeholder Dialogue, the attendees were able to participate in a traditional fastener handcrafting class, one of the experiences YKK offers on its tours.

Some attendees said that they found the class an "enjoyable and effective learning experience that allowed us to understand YKK's traditional manufacturing technique, which could produce up to 100 fasteners a day."



Clipping the tape into a jig and embedding the elements, setting them all in the same direction



Clamping the elements in place using a pressing machine. The resulting fastener (insert)



●Cultivation of Craftsmen

Hirano (Trading partner): The membership of the construction Worker’s Union has been decreasing, falling to 370,000 members in 2010, from 940,000 in the 1970s. Due to the decrease, YKK will have to install such housing products as APW itself as well as provide maintenance and servicing.

②Making Our Accomplishments in Manufacturing Visible

Professor: How much effort is YKK putting into clearly communicating to users the energy-savings possible with APW?

YKK: Such data is presented in brochures. In addition, our Japan-wide sales staff network provides customers with data obtained from simulations.

Inagaki (Consumer): I think YKK should set up more places to display the effectiveness of its products.

Nakaya (Local spokesman): I think it is good to consider drawing public attention to such prize-winning activities like the YKK Center Park development, which received an award from the Japan Society of Civil Engineers for its landscape design.

YKK: In addition to brochures and publicizing activities at show-rooms, we plan to engage in such popular activities as offering prizes to the public.

③Educational Activities

Matsuoka (Student): I think that the content of YKK Tours can be incorporated into on-demand school events with lectures by YKK staff.

YKK: In fiscal 2011 alone, some 16,000 people participated in YKK Tours, with a total of 50,000 people attending various events. We plan to assign about 10 more employees and may add more.

Professor: If YKK introduces its technologies and products to students attending local industrial high schools and the engineering departments of universities, it will help facilitate a feeling of attachment among them with regard to local companies. I would be grateful if YKK would consider such an initiative.

■ Further Growth in Kurobe

Nakaya (Local spokesman): It is only a dream, but I would like to see a house made entirely out of YKK products.

Hirano (Trading partner): To foster a prosperous community, I would like to further cooperate with YKK.

Professor: I believe that Kurobe, a region blessed with an abundant natural environment, is suitable place to experience Japan’s unique richness. Weaving the cultural and social background of the Hokuriku region, Toyama prefecture and Kurobe City into its corporate policies, YKK should start by communicating its philosophy to Japan and to the world. In addition, our expectation for YKK is that it will create products that are eco-friendly and socially beneficial, such as barrier-free and universal design products reflecting the value added that YKK brings. At the same time, the impact of production processes on the environment and society must be considered at all stages, including manufacturing, distribution and recycling.

YKK: The ideas you have shared with us are greatly appreciated and we promise to apply them to our future activities, thank you.



Comments and Opinions Offered at the Stakeholder Dialogue	
Product development	Contribute to a low-carbon and recycling-oriented society in line with changes in the social structure
Improve public perception	Make our accomplishments in manufacturing more visible
Educational activities	Offer on-demand lectures for students utilizing the content of YKK Tours

The Group will continue to pursue activities based on opinions voiced in the 2011 dialogue.



Facilitator
Noriyasu Kunori, Ph.D.

Professor, Department of Environmental Engineering, Faculty of Engineering, Toyama Prefectural University

Through Stakeholder Dialogue

This was YKK’s third stakeholder dialogue held to encourage honest dialogue between the Company and related parties who are impacted, directly or indirectly, by YKK’s corporate activities. The aim of this dialogue was to promote mutual benefit with society through cooperation. I am appreciative that the YKK Group is offering such an opportunity for dialogue on an ongoing basis. In relation to the theme of “Coexistence with nature,” the YKK Group reported on the current status of initiatives involving such issues as the protection of local ecosystems as well as the results of surveys of groundwater usage, which were discussed last year. Based on the report, discussion was brisk and the Group’s continued efforts to coexist with nature became clear. On the theme of “Stakeholders’ Expectations Regarding YKK Group Operations: Aiming to Achieve a Sustainable Society,” we heard that stakeholders hope YKK will develop eco-conscious products and housing systems that reflect changes in society. In addition, I hope that the YKK Group will cooperate with stakeholders, not only in Japan but in the Group’s overseas facilities.